

NANOCIRCUIT AND SELF-CORRECTING ETCHING METHOD FOR FABRICATING SAME

ABSTRACT OF THE DISCLOSURE

A self-correcting etching (SCORE) process for fabricating microstructure is provided. The SCORE process of the present invention is particularly useful for reducing preselected features of a hard mask without degrading the variation of the critical dimension (CD) within each wafer. Alternatively, the CD variation of the hard mask features' produced during printing can be substantially reduced by applying SCORE. Hence, ultra-sub-lithographic features (e.g., nanostructures) can be reliably fabricated. Consequently, the method of the present invention can be used to increase the circuit performance, while improving the manufacturing yield.